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| 10/071,660 | 02/08/2002 | Craig D. Rublee | 07844-517001 | 4020 |

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| EXAMINER | |
|---|---|
| CHUNG, DANIEL J | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2677 | |

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/071,660 | RUBLEE, CRAIG D. | |
| | Examiner | Art Unit | |
| | Daniel J. Chung | 2672 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *13 April 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4-13-05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

Claims 1-26 are presented for examination. This office action is in response to the amendment filed on 4-13-2005.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

**Claims 1-4,7-17 and 20-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schindler (5,630,037) in view of Kurzweil et al. (6,587,583)**

Regarding claim 1, Schindler discloses that the claimed feature of a computer implemented method for rendering a foreground area of an image, the image including the foreground area and a background, the method comprising: identifying a target area in the image, the target area [i.e. "fringe region"; 131] being an area of the background [130] associated with the foreground area [132] or an area of the foreground area associated with an area of the background, the target area containing a number of pixels ["pixels"], each pixel having one or more attribute values [i.e. RGB values"] associated with one or more attributes; selecting [8] a sample set of pixels to sample ["sample"] from the target area [131], the sample set of pixels including less than the

number of pixels in the target area; identifying [10] the attribute value of a first attribute for each of a plurality of the pixels in the sample set to identify a plurality of attribute values; predicting [10] an attribute value of the first attribute for the target area based on the plurality of identified attribute values; and rendering [12] at least a portion of the foreground area based on the predicted attribute value. (See Abstract, Fig 1, Fig 3, Fig 5-7, col 2 line 25-67)

Schindler does not specifically discloses the utilizing of sample set of pixels within the target area. However, such limitation is shown in the teaching of Kurzweil et al. [i.e. 'utilizing of samples of pixels in image representations', 'determining the foreground colors by retrieving a plurality of samples of blocks of pixels'] (See col 2 line 18-33, col 22 line 39-53, col 23 line 22-37, col 26 line 4-17) It would have been obvious to one skilled in the art to incorporate the teaching of Kurzweil into the teaching of Schindler, in order to effectively calculate the image data value at rapid manner by eliminating repetitious or unnecessary calculations , as such improvement ['sampling method'] is also advantageous desirable in the teaching of Schindler for providing a faster image composting process with easy manner.

Regarding claim 2, Schindler discloses that the one or more attributes include a color attribute. [i.e. RGB values] (See Abstract Fig 3, Fig 5)

Regarding claim 3, Schindler discloses that identifying the attribute value for each of a plurality of the pixels in the sample set includes determining whether the identified attribute value matches a predetermined attribute value. (See Fig 3-4)

Regarding claim 4, Schindler discloses that determining whether the attribute value matches a predetermined attribute value includes comparing the attribute value of each of the plurality of pixels to a set of attribute values within a threshold distance from the predetermined attribute value. (See Fig 3-4)

Regarding claim 7, Schindler discloses that the sample set of pixels is randomly selected from the target area. (See Fig 7)

Regarding claim 8, Schindler discloses that the one ore more attributes include a transparency attribute. (See col 10 line 11-21)

Regarding claim 9, Schindler discloses that rendering at least a portion of the foreground area includes rendering the foreground area; and rendering the foreground area includes applying a rendering function based on the predicted attribute value. (See Abstract, Fig 1, Fig 5)

Regarding claim 10, Schindler discloses that applying a rendering function includes selecting a rendering function from a plurality of rendering functions based on the predicted attribute value. (See Abstract, Fig 1, Fig 5)

Regarding claim 11, Schindler discloses that the plurality of rendering functions includes a first rendering function for rendering foreground areas associated with background areas having a predetermined attribute value; and rendering the foreground area includes applying the first rendering function if the predicted value matches the predetermined attribute value. [i.e. fringe region] (See Abstract, Fig 1, Fig 5)

Regarding claim 12, Schindler discloses that rendering the foreground area includes applying a second rendering function if the predicted value does not match the predetermined attribute value. [i.e. non-fringe region] (See Abstract, Fig 1, Fig 5)

Regarding claim 13, refer to the discussion for the claim 1 hereinabove, Schindler discloses that the claimed feature of a computer implemented method for rendering a foreground area of an image, the image including the foreground area and an associated background area, the background area including a number of pixels, the method comprising: selecting [6] a set of pixels ["pixels"] to sample ["sample"] from the background area [130], the selected set of pixels including less than the number of pixels in the background area; identifying a color ["RGB"] of a plurality of pixels in the selected set; predicting a color ["background color"] of the background area based on

the identified color; and based on the predicted color of the background area, selecting a rendering function from a plurality of rendering functions, the plurality of rendering functions including a first rendering function for rendering foreground areas associated with background areas having a predetermined background color, [i.e. fringe region] and a second rendering function for rendering foreground areas not associated with background areas having the predetermined background color; [i.e. non-fringe region] and rendering [12] at least a portion of the foreground area using the selected rendering function. (See Abstract, Fig 1, Fig 3, Fig 5-7, col 2 line 25-67; Also See col 8 line 8 line 29-55, col 24 line 17-30 in Kurzweil et al ) [it is well known in the art to implement the different rendering function for different set of image data, in order to utilize faster image data calculations. Since both references show the manipulation of different set of image attribute values for different regions [i.e. fringe/ non-fringe region,] in display, utilizing of first and second rendering functions, as claimed, is inherently met by the both references herewithin.]

Regarding claim 14, claim 14 is similar in scope to the claim 1, and thus the rejection to claim 1 hereinabove is also applicable to claim 14.

Regarding claim 15, claim 15 is similar in scope to the claim 2, and thus the rejection to claim 2 hereinabove is also applicable to claim 15.

Regarding claim 16, claim 16 is similar in scope to the claim 3, and thus the rejection to claim 3 hereinabove is also applicable to claim 16.

Regarding claim 17, claim 17 is similar in scope to the claim 4, and thus the rejection to claim 4 hereinabove is also applicable to claim 17.

Regarding claim 20, claim 20 is similar in scope to the claim 7, and thus the rejection to claim 7 hereinabove is also applicable to claim 20.

Regarding claim 21, claim 21 is similar in scope to the claim 8, and thus the rejection to claim 8 hereinabove is also applicable to claim 21.

Regarding claim 22, claim 22 is similar in scope to the claim 9, and thus the rejection to claim 9 hereinabove is also applicable to claim 22.

Regarding claim 23, claim 23 is similar in scope to the claim 10, and thus the rejection to claim 10 hereinabove is also applicable to claim 23.

Regarding claim 24, claim 24 is similar in scope to the claim 11, and thus the rejection to claim 11 hereinabove is also applicable to claim 24.

Regarding claim 25, claim 25 is similar in scope to the claim 12, and thus the rejection to claim 12 hereinabove is also applicable to claim 25.

Regarding claim 26, claim 26 is similar in scope to the claim 13, and thus the rejection to claim 13 hereinabove is also applicable to claim 26.

**Claims 5-6 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schindler in view of Kurzweil et al. (6,587,583), and further in view of Kurzweil et al. (6,320,982)**

Regarding claims 5-6, the combination of Schindler and Kurzweil et al ['583'] do not specifically discloses that the set of pixels to sample is selected by defining a sample size based on an allowable percentage of pixels that do not match the predetermined attribute value and the desired confidence level, and selecting a number of pixels from the target area based on the sample size. However, such limitations are shown in the teaching of Kurzweil et al ['982']. (See col 9 line 30-56, col 23 line 32-39) It would have been obvious to one skilled in the art to incorporate the teaching of Kurzweil ['982'] into the teaching of Schindler, in order to effectively estimate the proper color values, as such improvement is also advantageous desirable in the teaching of Schindler for providing optimized image composting process with easy manner.

Regarding claim 18, claim 18 is similar in scope to the claim 5, and thus the rejection to claim 5 hereinabove is also applicable to claim 18.

Regarding claim 19, claim 19 is similar in scope to the claim 6, and thus the rejection to claim 6 hereinabove is also applicable to claim 19.

### *Response to Arguments/Amendments*

Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection. Specifically, in response to the applicant's argument that the cited references do not disclose the sample set of pixels within the target area (See Remarks), the newly submitted reference (Kurzweil et al ['583']) clearly discloses a utilizing of samples of pixels in image representations and determining the foreground colors by retrieving a plurality of samples of blocks of pixels in his teaching. (See col 2 line 18-33, col 22 line 39-53, col 23 line 22-37, col 26 line 4-17). See the rejection hereinabove.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Chung whose telephone number is (571) 272-7657. He can normally be reached Monday-Thursday

and alternate Fridays from 7:30am- 5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael, Razavi, can be reached at (571) 272-7664.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

**571-273-8300 (Central fax)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

djc
June 22, 2005

MICHAEL RAZAVI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600